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Federal Communications Commission
Office of the Secretary**Fax****To:** Ms. Marlene H. Dortch**From:** Carl Hofferberth**Fax:** 866 418 0232**Pages:** 3 including cover page**Phone:** [Click here and type phone number]**Date:** 7/28/2005**Re:** Redistribution of Spectrum**CC:**

Docket # IB 05-221

☐ **Urgent**☒ **For Review**☐ **Please Comment**☐ **Please Reply**☐ **Please Recycle**• **Comments:** Thank you for your time and consideration

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

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Federal Comm
Office

July 25, 2005

Re: Redistribution of Spectrum to the 2 GHz Mobile Satellite Service
Providers, Docket No. IB 05-221

Dear Ms. Dortch:

We the undersigned, along with our various component suppliers and subcontractors, constitute a consortium of Virginia-based technology firms who design, develop and supply security applications to the United States Departments of Defense and Homeland Security and would like to bring to your attention the importance of the above-referenced matter with respect to future homeland security initiatives.

In June, the FCC issued a public notice the outcome of which - we believe - will directly impact the future of homeland security for the American people.¹ Specifically, the FCC is seeking comment on whether to distribute additional spectrum to two existing Mobile Satellite Systems (MSS) licensees so that 2x10 MHz of spectrum is available for each of these systems, or whether this spectrum should be reassigned to a new entrant, or reallocated for other uses.

As developers of homeland security communications applications, we believe it is imperative that the Commission create a regulatory regime that enables the development of communications systems that are ubiquitous across the nation, fully redundant and reliable and have sufficient capacity to carry critical communications services for public safety and homeland security. In our experience, any impediment to the development of advanced communications applications, particularly in the wireless area, retards the deployment of these innovative services. Legacy networks are unable to support the types of advanced security applications being developed by leading technology innovators. Advanced security applications should not be dependent on networks with a variety of protocols, varied bandwidth, competing commercial priorities and products and tenuous interconnection arrangements. The Commission has an opportunity in this proceeding to avoid these impediments - which by their very nature take time and resources to work around - by ensuring a next generation, ubiquitous nation-wide wireless system. Such a

¹ Public Notice, Commission Invites Comments Concerning Use of Portions of Returned 2 GHz Mobile Satellite Service Frequencies, FCC 05-134 (June 29, 2005); Public Notice, Commission Invites Comments Concerning Use of Portions of Returned 2 GHz Mobile Satellite Service Frequencies, FCC 05-133 (June 29, 2005).

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system permits us and our end users – the public safety and security entities at the federal, state and local levels – to develop, design and deploy critical advanced security applications without undo delay or complication. Unfortunately such a system as we have described does not exist today.

The 2 GHz band MSS systems that are currently licensed can fill this void only if the Commission allows them access to the full 2x10 MHz of spectrum that is available in the S band. If these systems are curtailed in the amount of spectrum that is available to them, they will not have sufficient capacity to deploy, on an economic and technically sound basis, the types of applications contemplated for development. For example, we are in the proposal stage for developing an advanced imaging application that could permit passenger scrutiny from *inside an aircraft before it departs the runway*. This could be performed via a radio frequency [RF] wireless signal to a satellite with ultimate transport to TSA within the Department of Homeland Security. Technical challenges aside, the resolution and bandwidth required may prove to be an impediment if relying on existing systems with pre-programmed protocols. Additionally, the Department of Defense has issued a Request For Information on the feasibility of interconnecting via broadband 450 critical domestic sites to close any gaps in our homeland defense infrastructure. It is our opinion that such interconnection via legacy systems, particularly fiber networks is not feasible, will prove too costly and take too long. Most of these sites are in rural areas and outside the metropolitan areas where dense networks are located. Consequently, a wireless-based communications with sufficient bandwidth could fill this requirement if it is ubiquitous, nationwide and dedicated, at least in part, to this need.

In 2004, the National Security Telecommunications Advisory Committee ("NSTAC") Satellite Task Force Report to the President found that the commercial satellite industry is critical to national, economic, and homeland security. The innovative satellite systems with terrestrial components that are being developed in the S band further advance this vision. Providing these systems with 2x10 MHz of spectrum will ensure that this vision will be realized and will advance our homeland security. Additionally, it will provide the technical certainty of a compatible network that we can use as a standard upon which we can base the advanced security applications our country will need in the not too distant future.

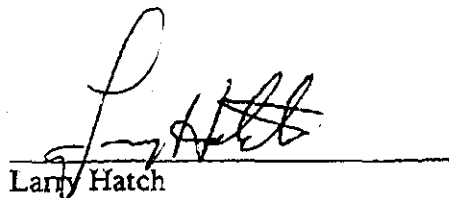
Consequently, we ask that the FCC consider the impact of this spectrum redistribution on public safety and the important role that robust MSS systems will play in forthcoming advanced security applications.

Thank you for your attention.

Sincerely,



Carl Hofferberth
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